

## **CHAPTER 6 SPECIAL STUDIES**

### **I. PRESENT POLICY**

Currently, there is no statewide policy for conducting special studies. However, the Los Angeles RWQCB has some guidance regarding special studies for site-specific objectives in their basin plan. RWQCBs do have the discretion to conduct studies as they see the need.

### **II. ISSUE DESCRIPTION**

The CTR is promulgating chemical-specific, numeric criteria for priority toxic pollutants for the State of California. These criteria are based on Federal criteria guidance and recent recalculations of those criteria guidance. The CTR criteria were derived and are intended to protect human health and aquatic life, and they apply generally to surface waters, excluding ocean waters. In addition, the State's proposed Policy includes a toxicity objective for the non-ocean surface waters of the State.

In some instances, implementing the CTR criteria, SWRCB toxicity objective, or application of existing basin plan objectives for priority toxic pollutants may require a special study. A special study can examine the site-specific factors of a water quality issue for a specified portion of the waters of the State. Obtaining site-specific data through a special study can provide data necessary for regulatory or watershed decisions.

For example, a discharger may want to propose a mixing zone for effluent that is being discharged to a stream. In order to determine the appropriate size of the mixing zone, a study evaluating the characteristics of the discharge and stream may be necessary (see Chapter 1.2.2). The study may be complex enough that other regulatory agencies or stakeholders are involved.

In other instances, the CTR criteria may not be appropriate for a water body of concern. A special study may be useful to determine whether the site warrants a site-specific objective and what that objective should be. The study would evaluate such things as the beneficial uses of the water body, environmental characteristics of the water body, and water quality conditions that could reasonably be achieved.

Special studies may also be used to: conduct a use attainability analysis pursuant to 40 CFR 131.10; conduct regional ambient monitoring; conduct a metals translators study (see Chapter 1.2.1); evaluate reasonable potential to exceed CTR criteria in a water body (see Chapter 1.1); conduct contaminant fate and transport monitoring, etc.

In addition, some water quality problems may be better addressed on a watershed or water body basis rather than by an individual discharger (see Chapter 5.4). The SWRCB wishes to encourage and facilitate collaborative water body and watershed approaches, emphasizing the

inclusion of all affected stakeholders. Stakeholders may identify a need for a special study to address such issues as site-specific objectives, TMDL/WLA/LA (including using partnership and trading principals), etc., or may find that a monitoring study may be useful to identify the causes and effects of water quality problems.

The Site-Specific Objectives Task Force made the following recommendation regarding incorporation of a "Decision Tree" into the proposed Policy:

"While the task force recognizes that SSOs should be an integral part of the revised plans, we recognize that other regulatory options may be appropriate in some cases. The Decision Tree and supporting narrative discussion are intended to encourage constructive dialogue among stakeholders attempting to select the most appropriate regulatory option (e.g., Total Maximum Daily Load, Use Attainability Analysis, SSO, or permit relief). The decision tree is designed to guide users through a series of questions which may help to determine: (1) if there is a current or potential water quality issue requiring action; (2) the nature of the identified water quality issues; (3) the most likely regulatory action. The decision tree is intended for guidance only-- it is not intended as a prescriptive regulatory tool."

While there are many types of special studies, there are, nonetheless, elements common to how each of them should be conducted.

In providing guidance regarding studies for the development of site-specific objectives, the Los Angeles Basin Plan states that "[e]arly planning and coordination with Regional Board staff will be critical to the development of a successful plan for developing SSOs." The basin plan goes on to provide that "[a] detailed workplan will be developed with Regional Board staff and other agencies (if appropriate)" ... and that "State Board staff and the USEPA will participate in the development of the studies so that there is agreement on the process from the beginning of the study." The Los Angeles Basin Plan also includes specific factors that should be addressed when considering site-specific objectives.

Three of the public advisory task forces made recommendations regarding the need for a policy for conducting special studies. These three task forces identified the following issues, that are applicable to common elements of organizing and conducting special studies, that should be considered:

- Procedures for identifying and developing water quality issues and solutions to ensure that they are developed in an appropriate manner which is both efficient and consistent with applicable regulations;
- Identification of responsible parties for funding, managing, and executing the study;
- The propriety of conducting the studies on a water body or watershed basis;
- The necessity for interim permit limits during the special studies process;

- Development of an agreement among all parties before the process begins and a procedure to review the agreement if necessary;
- Development of a process that is both legally and scientifically defensible;
- Formalization of the peer review process; and
- Development of a dynamic process that encourages interest based, collaborative problem solving.

The Site-Specific Objectives Task Force made recommendations for policy language to establish a "framework for the development of SSOs." As a part of these recommendations, the task force made some recommendations that could be applicable to many types of special studies. These recommendations are outlined below.

#### Compliance Schedules and Interim Limits

"...During the period when site-specific objectives studies are being conducted, the Regional Board shall place effluent limits based upon the statewide water quality objectives into NPDES permits and waste discharge requirements only in conjunction with an appropriate compliance schedule. The compliance schedule shall allow sufficient time for collection of data, completion of SSO studies, and determination of compliance measures. While SSO studies are being conducted, interim effluent limits may be established by the Regional Board as provided in the Plan. Following final adoption of a site-specific objective, existing effluent limits shall be replaced with effluent limits consistent with the adopted site-specific objective. In the event that, for reasons beyond the control of the permittee, a decision whether or not to adopt site specific objectives has not been made before the end of the compliance schedule, the compliance schedule shall be extended for an additional period to allow time for a decision whether or not to adopt an SSO. However, in no event may a compliance schedule exceed the time period allowed for compliance with the statewide water quality objectives in the Plan, unless a variance has been granted."

#### Memorandum of Understanding (MOU)/Management Agency Agreement (MAA)

"...Prior to proceeding with site-specific objectives studies, the Regional Board shall enter into an MOU/MAA with interested parties, including, but not limited to, U.S. EPA Region IX, the SWRCB, and the affected dischargers.

- (a) The MOU/MAA shall include the following elements: Formation of a project team, including the signatories to the MOU/MAA, the State Department of Fish and Game, the U.S. Fish and Wildlife Service, and public interest groups.
- (b) Responsibilities of the parties.
- (c) Budget and cost-sharing plan.
- (d) Administrative policies and procedures to govern oversight of the SSO

- process.
- (e) Project schedule.
  - (f) A process for conflict resolution.
  - (g) Development of an SSO work plan."

#### Peer Review Panel

"...If, during the data interpretation phase of technical site-specific studies, the Regional Board, State Board, EPA Region IX, and/or other interested parties have differing opinions with regard to the interpretation of data collected in establishing the scientifically defensible potential objective(s), the Regional Board shall seek the advice of an independent scientific review panel consisting of at least three scientists with expertise in the field of aquatic toxicology and water quality criteria development methodology. The method of selecting the panel and other details regarding the conflict resolution process shall be included in the MOU. The findings of the scientific review panel shall be provided to the parties to the MOU, and made available to the members of the Regional Board in the event a scientific dispute remains unresolved at the time the scientifically defensible potential objective(s) is presented to the Regional Board for consideration."

#### Environmental and Economic Review

"...To ensure that economic and environmental impacts are adequately addressed, the Regional Board staff shall, as part of the SSO work plan:

- (i) Direct the preparation of an economic analysis documenting the economic impacts from one or more of the scientifically defensible potential objective(s) and the projected effluent limits derived from the objective(s) and present the economic analysis to the Regional Board;
- (ii) Comply with the California Environmental Quality Act."

Following are Permitting and Compliance Issues Task Force recommendations regarding special studies.

"...Many studies, e.g., studies necessary to develop TMDLs, would logically be done on a water body or watershed basis rather than on an individual discharger basis and would logically be funded by the State or jointly funded by multiple dischargers. But there are often not institutional structures in place that would facilitate joint funding of water body or watershed studies.

#### A. CONCERN

1. A number of the monitoring and other studies required in conjunction with the Statewide Plan implementation will involve considerable expenditures.
2. The State Board, Regional Boards, and local agencies in many cases will not have money budgeted to perform any significant studies. Smaller dischargers may be

especially hard-pressed to fund significant studies.

#### **B. RECOMMENDATION**

1. The Statewide Plans need to contain a policy on who is responsible for designing, funding, managing, and approving the various types of special studies that may be necessary during plan implementation.
2. The policy must be fair and not just pass on to local agencies or private parties responsibilities and costs that are the responsibilities of the State.
3. The policy must address the reality that many small and medium-sized dischargers may not have the resources necessary to perform studies on their own.
4. The Statewide Plans need to encourage and facilitate water body and watershed studies where appropriate...

...For all of these studies, responsible parties for funding, managing, and executing need to be identified..."

The Watershed Task Force expressed that the SWRCB should implement their ISWP and EBEP in a manner that promotes a coordinated and comprehensive approach to addressing all factors affecting water quality. In addition, this task force recommended flexibility in compliance schedules when stakeholders are involved in watershed efforts; interest based, collaborative problem solving; and an equitable sharing of costs. The Watershed Task Force made the following statement in support of the benefits of grass roots organization and control.

"...The bottom-up or grass roots approach has often consisted of voluntary efforts taken by local watershed stakeholders to control nonpoint sources and enhance beneficial uses via collaborative problem-solving. Because participants in these efforts have seen their interests effectively addressed, commitments have remained strong, and lasting, on-the-ground results have been achieved. In contrast, the top-down or regulatory approach consists of command-and-control specification of procedures, products, schedules, participants, etc., et. If regulators focus too heavily on procedural concerns, local stakeholder interests risk being neither identified nor addressed, commitment may be lacking, and improvements in beneficial uses may be nonexistent. A straightforward indication of the lack of attention to local stakeholders' real interests will be the development of watershed management plans that are never implemented. The regulatory approach can be useful in fostering the participation of stakeholders; however, it will usually be of more importance to focus on a grass roots watershed management approach."

### **III. ALTERNATIVES FOR SWRCB ACTION**

**Alternative 1. No action.** Under this alternative, there would be no statewide guidance to help RWQCBs or stakeholders organize and conduct special studies in an efficient manner that is consistent with applicable regulations.

**Alternative 2. Adopt the recommendations of the Site-Specific Objectives Task Force.** The recommendations of the this task force were developed for site-specific objectives studies; however, some of the concepts could be applied to other types of studies.

This task force's recommendations regarding compliance schedules and use of a scientific review panel should be included in statewide guidance for special studies; however, SWRCB staff recommend that they be incorporated as advisory, rather than mandatory, for two reasons.

First, a special studies policy will be used to help RWQCBs and other stakeholders develop many types of studies. (The recommendations of the Site-Specific Objectives Task Force addressed only that specific type of study; however most concepts can be applied to other types of studies.) Some studies will be very simple and involve few interested persons. Others may take longer and be more complex; involving numerous other regulatory agencies and stakeholders with various roles and interests regarding the purpose of the study. SWRCB staff do not believe it is appropriate to impose mandates for studies that may be appropriate for some, but overly burdensome and bureaucratic for other studies.

Second, stakeholders should be allowed to develop flexible and innovative solutions for water quality problems in their watershed. If the specific process of a special study is developed by a consensus process, there will be more cohesion between stakeholder groups and they will remain more committed to the project's goals. In addition, the recommendations of the Watershed Task Force emphasizes the importance of allowing stakeholders to take a grass roots approach to water quality issues instead of a regulatory approach.

Rather than requiring formal MOUs or MAAs for special studies, there is a need for a workplan to plan and coordinate study activities with RWQCB staff and other interested persons. The Site-Specific Objectives Task Force's recommendations regarding consideration of economic impacts and the California Environmental Quality Act should be incorporated in any statewide guidelines.

Language specifically addressing the development of site-specific objectives and amendment of waste discharge requirements or permits should not be included in statewide guidance for special studies, because the guidance should address many types of studies. The development of site-specific objectives should be addressed separately.

The Decision Tree and associated narrative discussion recommended by the Site-Specific Objectives Task Force could be incorporated into a statewide guidance document on special studies if a few modifications are made. These modifications will ensure that the guidance is applicable to many types of studies

**Alternative 3.** Adopt the recommendation of the Permitting and Compliance Issues Task Force. The SWRCB recognizes the concerns of the Permitting and Compliance Issues Task Force that agencies and/or dischargers may not have the resources to perform studies on their own. However, the SWRCB cannot set policy which provides formulas for cost-sharing or requires interested parties to contribute designated portions of the costs of a study. Agencies (including the SWRCB and RWQCBs) and/or dischargers must also obtain funding through their respective budgetary processes. There is a shortage of funds for special studies, and, where appropriate (e.g., a watershed study), the sharing of costs among those who support the overall goals of the study should be encouraged. Such cost sharing clearly depends on availability of funds.

The proposed Policy recognizes the importance of determining who is responsible for funding, managing, and executing the study. These issues must, however, be determined on a case-by-case basis considering who is involved in the study, the roles the stakeholders wish to play, and availability of funding. The proposed Policy recommends that the stakeholders define these roles and responsibilities early in the process of the study.

**Alternative 4.** Adopt the Recommendations of the Watershed Task Force. The proposed special studies Policy both encourages and allows for this watershed approach to solving water quality problems. The proposed Policy for special studies is flexible and avoids specification of procedural requirements so that stakeholders can find solutions to water quality problems that also address their own interests.

#### **IV. STAFF RECOMMENDATION**

Adopt a combination of Alternatives 2 through 4.